JOURNAL OF PALEONTOLOGY

INDEX TO VOLUME 31

AUTHOR INDEX

		No.	Page
	ALLEN, BILLY D., see UPSHAW, CHARLES F. (89)		
1.	AMOS, ARTURO J., New syringothyrid brachiopods from Mendoza, Argentina	1	99
2.	AXELROD, DANIEL I., Age-curve analysis of angiosperm floras	1	273
3.	BAIRD, DONALD, A *Physonemus* spine from the Pennsylvanian of West Virginia	5	1010
4.	BANKS, MAXWELL R., and JOHNSON, J. HARLAN, *Maclurites* and *Girvanella* in the Gordon River limestone (Ordovician) of Tasmania	3	632
5.	BRADSHAW, JOHN S., Laboratory studies on the rate of growth of the foraminifer, "*Streblus beccarii* (Linné) var. *tepida* (Cushman)"	6	1138
6.	BRODKORB, PIERCE, New passerine birds from the Pleistocene of Reddick, Florida	1	129
7.	BUMP, JAMES D., and COOK, HAROLD J., Preliminary announcement of an important new fossil deposit	5	973
8.	BUNKER, CARL M., Theropod Saurischian footprint discovery in the Wingate (Triassic) formation	5	973
9.	CALEY, EARLE R., and RICHARDS, JOHN F., Theophrastus on stones. (Review of)	5	1018
10.	CAMPBELL, K. S. W., A Lower Carboniferous brachiopod-coral fauna from New South Wales	1	34
	CLARK, DAVID L., see MILLER, A. K. (51)		
	COOK, HAROLD J., see BUMP, JAMES D. (7)		
11.	COOPER, CHALMER L., (Nomenclatural notes), New names for species of *Bairdia* and *Amphissites*	3	674
12.	COPELAND, MURRAY J., The Carboniferous genera *Palaeocaris* and *Euproops* in the Canadian Maritime Provinces	3	595
13.	COPELAND, MURRAY J., A redescription of *Ceratiocaris pusilla* Matthew 1889	3	600
14.	COPELAND, MURRAY J., A new species of the ostracod genus *Knoxiella* from the Middle Devonian Ludlowville formation of western New York	5	931
15.	CRAMER, HOWARD ROSS, Ordovician starfish from the Martinsburg shale, Swatara Gap, Pennsylvania	5	903
16.	DECKER, CHARLES E., and GOLD, IRWIN B., Bithecae, gonothecae and nematothecae on Graptoloidea	6	1154
	DINELEY, D. L., see RHODES, F. H. T. (69)		
	DINELEY, D. L., see RHODES, F. H. T. (70)		
17.	DUNCAN, HELEN, *Bighornia*, a new Ordovician coral genus	3	607
18.	DURHAM, J. WYATT, and MELVILLE, R. V., A classification of echinoids	1	242
19.	DURHAM, J. WYATT, Notes on echinoids	3	625
20.	EASTON, W. H., On the tetracoral *Lithostrotion harmodites* Milne-Edwards and Haime	3	616
21.	EASTON, W. H., On the tetracoral *Rotiphyllum radicula* (Rowley) from the Mississippian of Missouri	3	623
22.	ELIAS, M. K., Late Mississippian fauna from the Redoak Hollow formation of Southern Oklahoma, Part I	2	370
23.	ELIAS, MAXIM K., Late Mississippian fauna from the Redoak Hollow formation of Southern Oklahoma, Part II. Brachiopoda	3	487
24.	ELIAS, MAXIM K., Late Mississippian fauna from the Redoak Hollow formation of Southern Oklahoma, Part III, Pelecypoda	4	737
25.	EMERSON, WILLIAM K., Three new Tertiary scaphopods, with a review of extinct western North American Siphonodentaliidae	5	985
26.	FRANKEL, LARRY, The value of Pleistocene mollusks as index fossils of Wisconsin sub-ages in Nebraska	3	641
	FURNISH, W. M., see MILLER, A. K. (46)		
	FURNISH, W. M., see MILLER, A. K. (47)		
	FURNISH, W. M., see MILLER, A. K. (48)		
	FURNISH, W. M., see MILLER, A. K. (49)		
	FURNISH, W. M., see MILLER, A. K. (50)		
	FURNISH, W. M., see MILLER, A. K. (51)		
27.	GALLOWAY, J. J., Stromatoporoidea Sovetskogo Soyuza	4	834
28.	GLENISTER, ANNE TRELOAR, The Conodonts of the Ordovician Maquoketa formation in Iowa	4	715

GOLD, IRWIN B., see DECKER, CHARLES E. (16)

29. GUTSCHICK, RAYMOND C., and TRECKMAN, JOHN F., Lower Mississippian cephalopods from the Rockford limestone of northern Indiana ... 6 1148
30. HARRINGTON, HORACIO J., Notes on New Genera of Pliomeridae (Trilobita) ... 4 811
31. JAMES, GIDEON T., An Edentate from the Pleistocene of Texas ... 4 796

JOHNSON, J. HARLAN, see BANKS, MAXWELL R. (4)

32. KAWASE, YOSHIO, and OKULITCH, VLADIMIR J., Archaeocyatha from the Lower Cambrian of the Yukon Territory ... 5 913
33. KEMP, AUGUSTA HASSLOCK, The siphuncles of some coiled nautiloids from the Lower Permian of Baylor County, north-central Texas ... 3 591
34. KEMP, AUGUSTA HASSLOCK, Color retention in *Stenopoceras*, *Euomphalus*, and *Naticopsis* from the Lower Permian of North Central Texas ... 5 974

KESLING, ROBERT V., see STUMM, ERWIN C. (84)

35. KESLING, ROBERT V., and ROGERS, KENNETH J., Size, lobation, velate structures, and ornamentation in some beyrichiid ostracods ... 5 997
36. KIER, PORTER M., Tertiary Echinoidea from British Somaliland ... 5 839
37. KORNICKER, LOUIS S., Concentration of Ostracodes by alcohol flotation ... 5 1030
38. KURTÉN, BJÖRN, Mammal migrations, Cenozoic stratigraphy, and the age of Peking man and the australopithacines ... 1 215
39. LAUERNCICH, LAURA, (Paleontological notes) *Stillina*, A New Genus of Cretaceous Ostracoda ... 2 455
40. LEONARD, A. BYRON, A terrestrial gastropod fauna from Farmdale (Pleistocene) deposits in northwestern Illinois ... 5 977
41. LOEBLICH, JR., ALFRED R., and TAPPAN, HELEN, Correlation of the Gulf and Atlantic Coastal Plain Paleocene and Lower Eocene formations by means of planktonic Foraminifera ... 6 1109
42. MAC DONALD, J. R., New Records of Leptochoerids from the late Oligocene and early Miocene of South Dakota ... 3 673
43. MADSEN, F. JENSENIUS, On Walcott's supposed Cambrian Holothurians ... 1 281
44. MATTHEWS III, WILLIAM H., Marine Ecology as an aid in teaching Invertebrate Paleontology ... 2 463
45. MCGUGAN, ALAN, Upper Cretaceous Foraminifera from northern Ireland ... 2 329

MELVILLE, R. V., see DURHAM, J. WYATT (18)

46. MILLER, A. K., and FURNISH, W. M., Mississippian cephalopods of northern and eastern Alaska ... 6 1178
47. MILLER, A. K., and FURNISH, W. M., Permian ammonoids from Tunisia ... 4 705
48. MILLER, A. K., and FURNISH, W. M., A Second Permian Specimen of the Nautiloid *Aulametacoceras* ... 4 713
49. MILLER, A. K., and FURNISH, W. M., Permian ammonoids from southern Arabia ... 6 1043
50. MILLER, A. K., and FURNISH, W. M., Ammonoids of the basal Word formation, Glass Mountains, West Texas ... 6 1052
51. MILLER, A. K., and FURNISH, W. M., and CLARK, DAVID L., Permian ammonoids from western United States ... 6 1057
52. MILLER, JR., H. W., *Niobrarateuthis bonneri*, a new genus and species of squid from the Niobrara Formation of Kansas ... 4 809
53. MILLER, JR., HALSEY W., *Belemnitella praecursor* from the Niobrara formation of Kansas ... 5 908

MÜLLER, EVA. M., see MÜLLER, KLAUS J. (54)

54. MÜLLER, KLAUS J., and EVA M., Early Upper Devonian (Independence) conodonts from Iowa, Part I ... 6 1069
55. NAKKADY, S. E., Biostratigraphy and inter-regional correlation of the upper Senonian and lower Paleocene of Egypt ... 2 428
56. NITCKI, MATTHEW H., Protozoa as a semantic problem ... 3 662

NOREM, W. L., see WALOWEEK, W. (94)

57. OELRICK, THOMAS M., The status of the Upper Pliocene turtle, *Testudo turgida* Cope ... 1 228

OKULITCH, VLADIMIR J., see KAWASE, YOSHIO (32)

58. OLSON, EVERETT C., Triassic Dicynodont reptiles, Part I: The North American Genus *Placerias* ... 4 835
59. PAGE, RICHARD A., Biostratigraphy and Inter-regional Correlation of the Upper Senonian and Lower Paleocene of Egypt. (Discussion of) ... 6 1176
60. PALMER, ALISON R., Ontogenetic development of two olenellid trilobites ... 1 105
61. PEABODY, FRANK E., Pennsylvanian reptiles of Garnett, Kansas; Edaphosaurs ... 5 947
62. PETRUNKEVITCH, ALEXANDER, *Eohelea stridulans*, n. gen., n. sp., a striking example of paramorphism in an amber biting-midge ... 1 208
63. POULSEN, CHR., Improved method for whitening fossils for study. (notice) ... 5 1029

64. RAW, FRANK, Origin of chelicerates ... 1 139
65. RASETTI, FRANCO, Additional fossils from the Middle Cambrian Mt. Whyte formation of the Canadian Rocky Mountains ... 5 955
66. REESIDE, JR., JOHN B., Nonmarine pelecypod (*Nippononaia asinaria*) from the Lower Cretaceous of Colorado ... 3 651
67. REID, R. E. H., Hexactinellida "Hyalospongea" and the classification of Siliceous Sponges ... 1 282
68. RHODES, F. H. T., and WINGARD, PAUL, The structure, chemical composition and affinities of the Neurodonteformes ... 2 448
69. RHODES, F. H. T., and DINELEY, D. L., Devonian conodont faunas from Southwest England ... 2 353
70. RHODES, F. H. T., and DINELEY, D. L., Supplementary notes on Devonian conodont faunas from Southwest England ... 6 1175
71. RHODES, F. H. T., and WILSON, A. A., The Arthropod species *Anthrapalaemon dubius* and related forms ... 6 1159

RICHARDS, JOHN F., see CALEY, EARLE R. (9)

72. RIGBY, J. KEITH, Relationships between *Acanthocladia guadalupensis* and *Solenopora texana* and the Bryozoan-Algal consortium hypothesis ... 3 603
73. SHAW, ALAN B., Quantitative tilobite studies II. Measurement of the dorsal shell of non-agnostidean trilobites ... 1 193
74. SHAW, ALAN B., Paleontology of northwestern Vermont. VI. The early Middle Cambrian fauna ... 4 785
75. SHAW, ALAN B., Paleontology of Northwestern Vermont. VII. The lower Cambrian fauna (Corrections and addendum) ... 4 812
76. SHAW, ALAN B., Quantitative trilobite studies I. Errata ... 3 676
77. SHROCK, ROBERT R., Notice concerning "Acta Palaeontologica Polonica" ... 5 1029
78. SINCLAIR, G. WINSTON, (Nomenclatural notes) Date of some species of Pentremites ... 5 982
79. SPJELDNAES, NILS, The Genus *Fenestella* ... 3 675
80. SQUIRES, DONALD F., New Species of caryophylliid corals from the Gulf Coast Tertiary ... 5 992
81. STEPHENSON, LLOYD WILLIAM, Hilgardella, new name for the Cretaceous Bivalve Hilgardia, Preoccupied ... 4 795
82. ST. JEAN, JR., JOSEPH, Stromatoporoidea, in Treatise of Invertebrate Paleontology ... 4 836
83. STOKES, WILLIAM LEE, Pterodactyl tracks from the Morrison formation ... 5 952
84. STUMM, ERWIN C., and KESLING, ROBERT V., Note to authors concerning form and procedure for the Journal of Paleontology ... 5 1019
85. SWAIN, FREDERICK M., Early Middle Ordovician Ostracoda of the eastern United States ... 3 528

TAPPAN, HELEN, see LOEBLICH, ALFRED R. JR., (41)

86. TAYLOR, DWIGHT W., Pliocene fresh-water mollusks from Navajo County, Arizona ... 3 654
87. THOMPSON, M. L., Northern midcontinent Missourian fusulinids ... 2 289

TODD, ROBERT G., see UPSHAW, CHARLES F. (89)

88. TOOMEY, DONALD F., Giant scaphopod fragment from the lower Strawn (Pennsylvanian) of north-central Texas ... 2 457

TRECKMAN, JOHN F., see GUTSCHICK, RAYMOND C. (29)

89. UPSHAW, CHARLES F., TODD, ROBERT G., and ALLEN, BILLY D., Fluoridization of Microfossils ... 4 793
90. VAN DEN BOLD, W. A., Some ostracode homonyms ... 5 950
91. VERNON, ROBERT O., New Technique for casting fossils and forming molds ... 2 461
92. VERVILLE, G. J., Wolfcampian fusulinds from the Tensleep sandstone in the Big Horn Mountains, Wyoming ... 2 349
93. VON DER OSTEN, ERIMAR, A fauna from the Lower Cretaceous Barranquin formation of Venezuela ... 3 571
94. WALOWEEK, W., and NOREM, W. L., Geographic Range of *Tytthodiscus* extended to Alaska ... 3 674
95. WELLES, S. P., New name for a brachyopid labyrinthodont ... 5 982
96. WELLS, JOHN W., An anaspid crustacean from the Middle Devonian of New York ... 5 983
97. WHITTINGTON, HARRY B., Ontogeny of *Elliptocephala*, *Paradoxides*, *Sao*, *Blainia*, and *Triarthrus* (Trilobita) ... 5 934

WILSON, A. A., see RHODES, F. H. T. (71)

WINGARD, PAUL, see RHODES, F. H. T. (68)

98. YOCHELSON, ELLIS L., Notes on the gastropod *Palliseria robusta* Wilson ... 3 648
99. YOUNG, KEITH, Cretaceous ammonites from eastern Apache County, Arizona ... 6 1167
100. YOUNG, KEITH, Upper Albian (Cretaceous) Ammonoidea from Texas ... 1 1
101. ZELLER, EDWARD J., Mississippian endothyroid Foraminifera from the Cordilleran Geosyncline ... 4 679

SUBJECT INDEX

Alaska: echinoid (19).
algae: Ordovician, Tasmania (4); Texas, Permian (72).
America: western, echinoid (19).
ammonoid: Permian, Arabia (49); Permian, Texas (50); Permian, Tunisia (47); Permian, United States (51).
ammonite: Cretaceous, Arizona (99); Cretaceous, Texas (100).
Amphissites: Pennsylvanian, new name for (11).
anaspid crustacean: Devonian, New York (96).
angiosperm: flora, North America (2).
Arabia: Permian, ammonoid (49).
Archaeocyatha: Lower Cambrian, Yukon Territory (32).
Arachnid: *Eohelea stridulans* (62).
Arctic Archipelago: Upper Ordovician, coral (17).
Argentina: brachiopod, Lower Carboniferous (1).
Arizona: Cretaceous, ammonites (99); Jurassic, Pterodactyl track (83); Permian, nautiloid (48); Pliocene, Pelecypod (86).
Arthropod: Carboniferous, Canada (12); England, Upper Carboniferous (71); Silurian, New Brunswick (13).
Atlantic Coastal Plain: planktonic Foraminifera (41).
Aulametacoceras: nautiloid, Permian, Arizona (48).
Bairdia: Mississippian, new name for (11).
beyrichiid: ostracods (35).
Bighornia; Ordovician, coral (17)
bird: Pleistocene, Florida (6).
brachiopod: coral, Lower Carboniferous, New South Wales (10); Lower Carboniferous, Argentina (1).
Brachiopoda: Redoak Hollow formation, southern Oklahoma (23).
British Somaliland: Tertiary, Echinoidea (36).
Bryozoa: *Fenestella* (79); Texas, Permian (72).
Cambrian: Canada, fauna (65); Canada, holothurian (43); Nevada, trilobite (60).
Canada: Cambrian, fauna (65); Cambrian, holothurian (43); Carboniferous, arthropod (12).
Carboniferous: arthropod, Carboniferous, Canada (12).
Cenozoic: mammal migration (38).
Central America: echinoids (19).
cephalopods: Cretaceous, Kansas (52, 53); Mississippian, Indiana (29); Permian, Texas (33).
Ceratiocaris pusilla: Silurian, New Brunswick (13).
classification: sponges (67).
Colorado: Cretaceous, pelecypod (*Nippononaia asinaria*) (66); Triassic, footprint (8).
conodonts: Devonian, England (69, 70); Devonian, Iowa (54); Ordovician, Iowa (28).
corals: Lower Carboniferous, New South Wales (10); Tertiary, Gulf Coast (80).
Cordilleran Geosyncline: endothyroid, Foraminifera (101).
Cretaceous: ammonite, Arizona (99); ammonite, Texas (100); angiosperm, flora, North America (2); fauna, Venezuela (93); cephalopod, Kansas (52, 53); pelecypod, Colorado (66); Egypt (55); Foraminifera, Ireland (45); ostracod (39).
Devonian: anaspid crustacean, New York (96); conodonts, England (69, 70); conodonts, Iowa (54); ostracod, New York (14).
Echinoidea; classification (18); Tertiary, British Somaliland (36).
echinoids: notes on (19).
edentate: Pleistocene, Texas (31).
Egypt: Cretaceous, Paleocene (55).
England: Carboniferous, arthropod (71); Devonian, conodonts (69, 70).
Eocene: Lower, planktonic Foraminifera (41).
Eohelea stridulans: new genus, biting midge (62).
Euproops: Carboniferous, Canada (12).
fauna: Cambrian, Canada (65); Cretaceous, Venezuela (93).
Fenestella: bryozoa (79).
Fish: Pennsylvanian, West Virginia (3).
Florida: bird, Pleistocene (6).
fluoridization: microfossils (89).
Foraminifera: Cretaceous, Ireland (45); Mississippian, Cordilleran Geosyncline (101); Paleocene, Eocene, planktonic (41); rate of growth (5).
fossil deposit: Pliocene, Nebraska (7).
fusulinids: Pennsylvanian, northern midcontinent (87); Permian, Wyoming (92).
gastropod: *Palliseria robusta* (98); Plesistocene, Illinois (40).
Girvanella: Ordovician, algae (4).
Gordon River limestone: Ordovician, algae, Tasmania (4).

Graptoloidea: Upper Cambrian, Virginia, Tennessee (16).
Gulf Coast: Tertiary, coral (80).
Gulf Coastal Plain: planktonic, Foraminifera (41).
Hilgardia: pelecypod (81).
Holothurians: Cambrian, Canada (43).
homonyms: ostracode (90).
Illinois: Pleistocene, gastropod, fauna (40).
Indiana: Mississippian, cephalapod (29).
Iowa: Devonian, conodonts (54); Ordovician, conodonts (28).
Ireland: Cretaceous, Foraminifera (45).
Jurassic: pterodactyl tracks (83).
Kansas: Cretaceous, cephalopod (52, 53); Pennsylvanian, reptile (61); Pliocene, turtle (57).
Knoxiella: Middle Devonian, ostracod, New York (14).
Lithostrotion harmodites: Mississippian, tetracoral (20).
Lower Carboniferous: brachiopod, Argentina (1); brachiopod, coral fauna, New South Wales (10).
Lower Cambrian: Vermont (75); Archaeocyatha, Yukon (32).
Maclurites: Ordovician, algae (4).
Maquoketa formation: Ordovician, conodonts, Iowa (28).
measurement: trilobite (73).
Middle Cambrian: fauna, Vermont (74).
migration: mammals (38).
Missouri: Mississippian, tetracoral (21).
Mississippian: brachiopod, Oklahoma (23); cephalopod, Indiana (29); Foraminifera, Cordilleran Geosyncline (101); pelecypod, Oklahoma (24); Redoak Hollow, fauna, southern Oklahoma (22); tetracoral, *Lithostrotion harmodites* (20); tetracoral, Missouri (21).
mollusks: Pleistocene, Nebraska (26).
nautiloids: Permian, Arizona (48); Permian, Texas (34).
Nebraska: Pliocene, fossil deposit (7); Pleistocene, mollusks (26).
Neurodonteformes: Ordovician (68).
New Brunswick: Devonian, ostracod (14); Silurian, arthropod (13).
New York: Middle Devonian, anaspid crustacean (96).
North America: angiosperm, flora (2); Tertiary, scaphopods (25).
Northern midcontinent: Pennsylvanian, fusulinids (87).
Oklahoma: Mississippian, brachiopod (23); Mississippian, Redoak Hollow, fauna (22); Mississippian, pelecypod (24).
ontogeny: trilobite (97).
Ordovician: algae, Tasmania (4); conodonts, Iowa (28); coral, North America (17); Neurodonteformes (68); Ostrocoda (85); starfish, Pennsylvanian (15).
ostracods: beyrichiid (35); Devonian, New York (14).
Ostracoda: Ordovician (85).
Ostracode: concentration (37); homonyms (90).
Palaeocaris: Carboniferous, Canada (12).
Paleocene: Egypt (55); planktonic, Foraminifera, Gulf Coast (41).
Palliseria robusta: gastropod (98).
Peking man: mammal migration (38).
pelecypod: Hilgardia (81); Cretaceous, Colorado (66); Pliocene, Arizona (86); Mississippian, Oklahoma (24).
Pennsylvanian: reptile, Kansas (61); scaphopod, Texas (88); fusulinids, northern midcontinent (87); Ordovician, starfish (15); *Physonemus* spine, West Virginia (3).
Permian: fusulinids, Wyoming (92); bryozoa, algae, Texas (72); ammonoid, United States (51); ammonoid, Texas (50); ammonoid, Arabia (49); nautiloid, Arizona (48); ammonoid, Tunisia (47); nautiloid, Texas (34); Lower, cephalopod, Texas (33).
Pleistocene: Edentate, Texas (31); mollusks, Nebraska (26); bird, Florida (6); gastropod fauna, Illinois (40).
Pliocene: pelecypod, Arizona (86); turtle (57); fossil deposit, Nebraska (7).
Pliomeridae: new genera, trilobite (30).
Protozoa: semantic problem (56).
pterodactyl track: Jurassic, Arizona (83).
Redoak Hollow: fauna, southern Oklahoma (22).
reptile: Kansas, Pennsylvanian (61).
Rockford limestone: Mississippian, cephalopod, Indiana (29).
Rotiphyllum radicula: Mississippian, tetracoral (21).
scaphopod: Pennsylvanian, Texas (88); Tertiary, North America (25).
semantic problem: Protozoa (56).
sponges: classification (67).
starfish: Ordovician, Pennsylvanian (15).
Stillina: new genus, ostracod (39).

Streblus beccarii tepida: Foraminifera, rate of growth (5).
Tasmania: Ordovican, algae (4).
Tennessee: Upper Cambrian, graptolite (16).
Tertiary: angiosperm, flora (2); Echinodiea, British Somaliland (36); Gulf Coast, coral (80); scaphopod North America (25).
Testudo turgida: Pliocene, turtle (57).
tetracoral: Mississippian, *Lithostrotion harmodites* (20).
Texas: Cretaceous, ammonite (100); Pennsylvanian, scaphopod (88); Pliocene, turtle (57); Pleistocene, edentate (31); Permian, bryozoa, algae (72); Permian, ammonoid (50); Permian, nautiloid (34); Permian, cephalopod (33).
theropod: Triassic, Colorado (8).
Triassic: theropod, Colorado (8).
trilobite: ontogeny (97); measurement (73); chelicerates (64); Nevada, Cambrian, olenellid (60); new genera, Pliomeridae (30).
Tunisia: Permian, ammonoids (47).
turtle: Pliocene (57).
Upper Cambrian; graptolite, Virginia and Tennessee (16).
Upper Carboniferous: arthropod, England (71)
United States: Permian, ammonoid (51).
Venezuela: Cretaceous, fauna (93).
Vermont: Lower Cambrian (75); Middle Cambrian, fauna (74).
Virginia: Upper Cambrian, graptolite (16).
West Virginia: Pennsylvanian, *Physonemus* spine (3).
Wyoming: Permian, fusulinids (92).
Yukon Territory: Lower Cambrian, Archaeocyatha (32).